

In the Claims

1. (Previously presented) Miniaturized gas chromatograph comprising at least one injector (1), one separation column (2) and a detector (3) wherein the injector (1), separation column (2) and the detector (3) are combined on a circuit board (4) to give a gas chromatography module (5), and the injector (1) comprises a first sheet (6) with channels (12) and a second sheet (7) with channels (13) and which may be displaced relative to the latter, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (7, 6).

2. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the plastic is chemically inert.

3. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1 wherein the layer (8) of plastic is applied by plasma polymerization of organic monomers.

4. (Previously presented) Miniaturized gas chromatograph pursuant to claim 3, wherein the organic monomers are difluoromethane, hexafluorobutadiene and/or octafluorocyclobutane.

5. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the sheets (6, 7) are made of silicon.

6. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the plastic has a lower coefficient of static friction than silicon.

7. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising a control and evaluation unit (9) provided on the circuit board (4).

8. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising at least one heating element (10) configured such that one or more of the injector (1), the separation column (2) and/or the detector (3) can be temperature-controlled.

9. (Previously presented) Miniaturized gas chromatograph pursuant to claim 8, wherein at least one heating element (10) comprises ceramic plates with thick film heating elements.

10. (Previously presented) Miniaturized gas chromatograph pursuant to claim 8 comprising a plurality of recesses (15, 23, 24) provided in the circuit board (4) such that the electronic control and evaluation unit (9) is protected from the heat emitted by the heating elements (10).

11. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the second sheet (7) is covered by a cover sheet (11).

12. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the first sheet (6) comprises at least three channels (12), and the second sheet (7) comprises at least two supply channels (13) and two discharge channels (14).

13. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising a plurality of recesses (16) provided in the circuit board into which a plurality of capillaries (18) are countersunk for the gas flow.

14. (Canceled).

15. (Canceled).

16. (Canceled).

17. (Previously presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the detector (3) comprises a gas flow sensor whose signals enable a correction of the base line.

18. (Previously presented) Injector, particularly for a miniaturized gas chromatograph, the injector (1) comprising a first sheet (6) with channels (12), and a second sheet (7) with channels (13) and which may be displaced relative to the latter, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (6,7).

19. (Previously presented) Injector pursuant to claim 18, wherein the plastic is chemically inert.

20. (Previously presented) Injector pursuant to claim 18 wherein the layer (8) of plastic is applied by plasma polymerization of organic monomers.

21. (Previously presented) Injector pursuant to claim 20, wherein the organic monomers are difluoromethane, hexafluorobutadiene and/or octafluorocyclobutane.

22. (Previously presented) Injector pursuant to claim 18, wherein the plastic has a lower coefficient of static friction than silicon.

23. (Previously presented) Injector pursuant to claim 18 wherein the second sheet (7) is covered by a cover sheet (11).

24. (Canceled).

25. (Canceled).

26. (Canceled).